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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,167	08/30/2006	Francescantonio Melara	42531/DOB/ps	6047

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Milano, 20123
ITALY

06/26/2008

EXAMINER

O BRIEN, JEFFREY D

ART UNIT	PAPER NUMBER
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3677

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,167	Applicant(s) MELARA, FRANCESCANTONIO	
	Examiner Jeffrey O'Brien	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.
2. The information disclosure statement filed 8/30/2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 20 recites limitations not found in Claim 15 from which it depends, but which appear in Claim 17. There is insufficient antecedent basis for this limitation in the

claim. For purposes of examination, Claim 20 has been taken to depend from Claim 17 and has been examined as best understood.

6. Claim 20 further recites indefinite language "ovalize" and "ovalization". These terms are not recognized and are given no special definition in the specification. For purposes of examination. These terms have been taken to mean "orient" and "orientation" and the claim has been examined as best understood.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai (US 2005/0081329) herein referred to as '329.

10. 1-14. (canceled)

11. For Claim 15, '329 teaches a self-orienting caster for pieces of furniture and the like, comprising a pair of wheels (annotated Fig. 2: 3), which are supported so that they

can rotate about a horizontal axis by a supporting body (2), which has a cylindrical recess (20) that has a vertical axis and is open upward and axially offset with respect to said horizontal axis (as seen in Fig. 2), and in which a pivot (wherein the pivot is not shown but it is inherent to have a pivot to be inserted in the pivot hole) for the caster is inserted rotatably, said pivot being insertable in a receptacle of the piece of furniture in which the caster is to be fitted. '329 does not teach a through seat formed in said body, and a tubular element that is driven through said seat coaxially to said horizontal axis, but instead teaches a tubular element that is integrated with the through seat formed in the body. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to separate the through seat and tubular element, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179. '329 further teaches wherein the tubular element has two cylindrical tubular portions (21) that lie on opposite sides of said body (2) in order to rotatably support said wheels (3), means being provided for the axial and rotational locking of said tubular element in said seat (wherein the integral structure of the tubular element and seat provide axial and rotational locking) and means (22) being provided for retaining said wheels (3) on said tubular portions (21).

12. For Claim 16, '329 teaches the caster of claim 15, wherein said means for retaining said wheels (3) are constituted by annular slots (22, 32), which are formed at the free ends of said tubular portions and form respective annular lips, and by collars

(4), which are formed in said wheels (3) and engage in said slots (22, 32) so that they are retained by said collars (4) and retain said wheels (3) on said tubular portions (21).

13. For Claim 17, '329 does not teach the caster of claim 15, wherein said means for locking said tubular element in said seat comprise two annular ridges, which surround said tubular element and form a channel between them, and an annular protrusion, which is formed in said seat and can be engaged by forcing in said channel, said annular protrusion having two flat surfaces, which are associated with respective flat surfaces of said tubular element in order to prevent the rotation of said tubular element in said seat. It would have been an obvious matter of design choice to utilize annular protrusions, annular ridges and flat portions to lock the tubular element and seat, as Applicant has not disclosed that it solves any stated problem of the prior art or is for any particular purpose. It appears that the seat and tubular element locked by annular protrusions, annular ridges and flat portions would perform equally well as the integral tubular element and seat disclosed by '329.

14. For Claim 18, '329 teaches the caster of claim 15, wherein annular ridges (annotated Fig. 2: A) protrude from opposite sides of said supporting body and surround coaxially said tubular portions (21), and said wheels (3), on the side directed toward said body (2), are provided with annular grooves (B) that are suitable to receive said ridges (A).

15. For Claim 19, '329 teaches the caster of claim 15, wherein said tubular portions (21) form respective rolling tracks (22) for rolling elements (50) of bearings (5) in order to rotatably support said wheels (3).

16. For Claim 24, '329 teaches the caster of claim 19, wherein said supporting bearings are constituted by an annular cage (4), which is provided with a plurality of receptacles (41) for said rolling elements (50) formed by axial partitions, means (annotated Fig. 2: C) being provided for retaining said rolling elements in said receptacles.

17. For Claim 25, '329 teaches the caster of claim 24, wherein said retention means (C) are constituted by teeth, which protrude from said partitions into said receptacles.

18. For Claim 26, '329 teaches the caster of claim 24, wherein said retention means are constituted by a ring (32), which is associated with said cage (4) by means of an annular flange (40) that protrudes from one of its faces and engages in slits formed in the ends of said partitions.

19. Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai (US 2005/0081329) herein referred to as '329 as applied to claim 15 above, and further in view of Melara (US 4,667,366) herein referred to as '366.

20. For Claim 27, '329 does not teach the caster of claim 15, wherein said pivot can rotate in a bush that is inserted in said recess and is retained axially by an annular lip, which is formed on the rim of said recess and is folded onto said bush, but is instead silent as to the structure of the pivot and recess. '366 teaches wherein a pivot (Fig. 5: 9) can rotate in a bush (22) that is inserted in a recess and is retained axially by an annular lip (24), which is formed on the rim of said recess and is folded onto said bush. It would have been obvious to one of ordinary skill in the art at the time the invention was made

to apply the bush of '366 to the caster of '329 in order to allow it to securely and quietly attach to a furniture item such as a chair.

21. For Claim 28, '329 does not teach the caster of claim 15, comprising an element for covering said body that is shaped so as to mate with its contour, said element being locked on said body by an annular lip formed on the rim of said recess. '366 teaches a caster comprising an element (Fig. 3: 15) for covering a body that is shaped so as to mate with its contour, said element being locked on said body by an annular lip (Fig. 1: 13) formed on the rim of said recess. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the cover of '366 to the caster of '329 in order to effectively strengthen the caster, as well as to prevent dust from penetrating the pivot recess.



23. For Claims 20-22, as best understood to depend from Claim 17, '329 does not teach the limitations. For Claims 20-22, '369 teaches a caster as best understood to depend from claim 17, wherein a seat (Figs. 9-12: 28) is oriented in a direction of the vertical axis and an elastic means (48) is interposed between a tubular element (32) and a body (26) and raise the body (26) with respect to the tubular element (32) for

braking the wheels wherein the members are in frictional contact when the caster is not loaded and are released in a loaded condition allowing the wheels to rotate freely, wherein the elastic member is a spring. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the locking mechanism of '369 to the caster of '329 in order to allow for automatic braking of the caster when it is in an unloaded condition and free rotation when the caster is in a loaded condition.

24. For Claim 23, '329 as modified by '369 does not teach the caster of claim 22, wherein a hole is formed in said body, in a diametrically opposite position with respect to said seat of the spring, and is suitable to receive a screw that acts on said tubular element in order to lift it into the position for releasing said wheels. Examiner takes official notice that it is old and well known to use a screw member to adjust the height and position of a caster member. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have applied a hole having a screw member to '329 as modified by '369 in order to adjust the height of the braking member in order to effectively adjust the amount of weight required to deactivate the braking mechanism.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey O'Brien whose telephone number is (571)270-3655. The examiner can normally be reached on Monday through Friday 8:00am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on 571-272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Victor Batson/
Supervisory Patent Examiner, Art Unit 3677